

we follow Fernald and Rehder in recognizing two forms,* and find that only the southern form enters Illinois in any quantity. Or it may be that the beech avoids the richest soils, with abundant soil fauna, such as characterize most of Illinois; though it is regarded as one of the most typical "climax" trees by the ecologists or successionists of the Chicago school. *Quercus velutina* appears to be the most abundant tree in the state. There are five or six evergreens in Illinois, but none are abundant enough to appear in Hall and Ingall's statistics, and all combined they probably do not make up more than 1 per cent of the forest wealth of the state.

If similar statistics could be worked out for other states it would go far toward filling the long-felt want of an inventory of our forests, which are becoming scarcer and more valuable all the time. About the only obvious shortcomings of this report are that it did not cover the whole state statistically, a forest map intended to accompany it was omitted for lack of funds, and the species are lumped together too much in the tables; all of which could probably be remedied without great expense.

ROLAND M. HARPER

Emerson and Weed's *Our Trees*†

Of the popular guides for the identification of trees, none is more attractively gotten up than this. To the fifth edition just out an introduction has been added, calling attention to the seasonal changes of trees. A full-page illustration is given to each species. Leaves, flowers and fruits have been photographed and a small inset view of the whole tree has been added. On the page facing the illustrations is the description calling attention to the distinguishing characteristics. Here related species not illustrated are sometimes mentioned, but the book is not intended to be complete in this respect. The arrangement and Latin names are those of Professor Sargent's *Manual of the Trees of North America* (with the ginkgo still in the Yew family);

* See Jour. Elisha Mitchell Sci. Soc. 33 117 (footnote). 1917.

† Emerson, Arthur I., and Weed, Clarence M. *Our Trees, How to Know them.* 5th edition, pp. xxi + 295, 149 illustrations. Philadelphia and London, J. B. Lippincott Co. 1918. Price \$3.50 net.

Latin names of other standard works are also mentioned, but prominence is given to the English names. A number of introduced trees are included, such as European larch and yew, English and Scotch elm, sycamore and Norway maple, ailanthus, and others.

ALFRED GUNDERSEN.

Mosher's Grasses of Illinois

Dr. Edna Mosher's Grasses of Illinois (Bulletin No. 205 of the University of Illinois Agricultural Experiment Station) is the most notable contribution to the agrostology of the Middle West since the publication of Pammel, Ball and Scribner's Grasses of Iowa, and the first complete list of the grasses of the state since that of Lapham in 1857. In the sixty years since the appearance of Lapham's catalogue, the number of species known to exist within the limits of the state has almost doubled. The present publication lists 204 species, representing 63 genera. Many of these species are recent introductions, to which attention is here called for the first time. The author has very carefully verified all specimens cited, and has added some valuable comments on the economic side. The book is not a mere catalogue, but is prefaced by a brief and untechnical discussion of the structure of grasses that will make it of value as an introductory text-book. Each species is illustrated by a careful drawing, and the descriptions of genera are clear and accurate.

The bibliographies prefixed to each species differ somewhat from the accepted usage in that they are restricted to the *Illinois* history of the species, and might in this way lead to confusion. Dr. Mosher's practice of reducing her citations simply to the surname of the author and year of publication certainly economizes space, but is almost *too* concise. A beginner might not always understand that "Michaux '03" and "Britton '07" belong to different centuries.

A more serious departure from generally accepted usage is found in the failure of the key to recognize the division of the grass family into tribes. As a result, the system of classification becomes somewhat arbitrary and empirical, and the beginner runs the risk of not apprehending the natural relationships of the genera. Doubtless if the determination of a particular